CycleOps Joule™
User Guide

Joule is compatible with any ANT+™ compatible power meter, speed sensor, cadence sensor, or heart rate sensor.

CycleOps POWER

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Modifications
Saris Cycling Group, Inc reserves the right to make improvements and/or updates to the products described herein at any time without notice.

Connect your Joule with ANT+ heart rate monitors or bike sensors. For a complete listing of ANT+ certified products and their specific interoperability, visit the ANT+ product directory.
http://www.thisisant.com/modules/mod_product-directory.php

This device complies with part 15 of FCC Rules and Rss-210 of IC Rules. Operation is subjected to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

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CHAPTER 1: STARTING OUT

Thank you for purchasing the CycleOps Joule. This user guide is just one of the resources to help you understand all the features the Joule has to offer.

Please visit www.cycleops.com to:

- Learn more about Joule and the CycleOps System of products including stationary trainers, indoor cycles, software and power meters
- Register all CycleOps products and activate warranty
- View instructional videos
- Sign up for the CycleOps Power newsletter your source for the latest news and technical updates from CycleOps Power

UNPACKING JOULE

PACKAGE CONTENTS:

PART	QTY
Joule computer	1
Heart rate strap (select models)	1
Stem/Handlebar mount	1
Front mount	1
Mount o-rings (2 sm/2 lg)	4
Micro-USB cable	1
Zip ties	2

COMPATIBILITY

The Joule is compatible with any ANT+ power meter, heart rate sensor, cadence sensor, speed sensor, or combination speed/cadence sensor. In addition to those ANT+ sensors, the Joule is also compatable with:

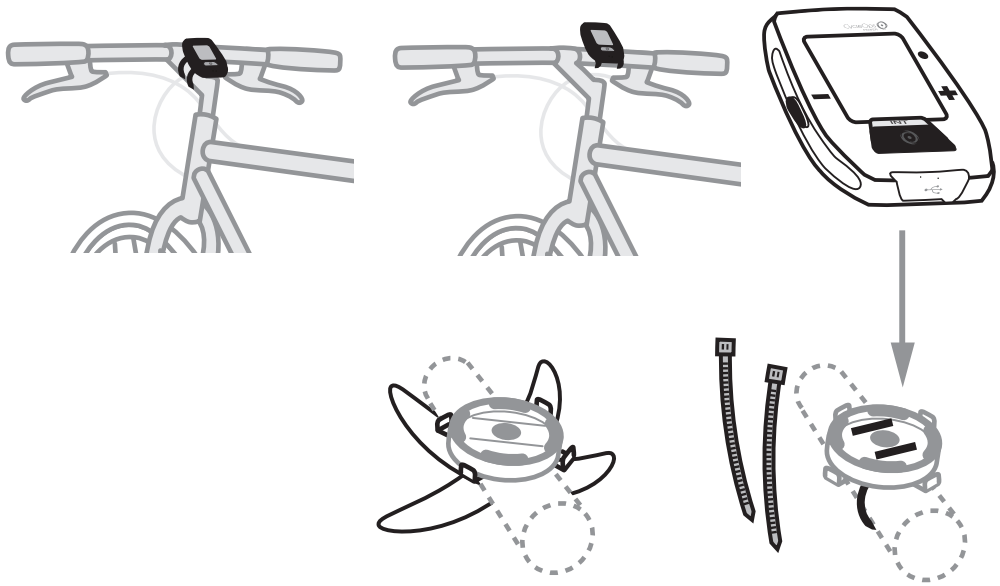
CycleOps 200Pro Indoor Cycle
CycleOps 300Pro Indoor Cycle

CHAPTER 1: STARTING OUT

INSTALLATION

Installing the CycleOps Joule

STEM/HANDLEBAR MOUNT

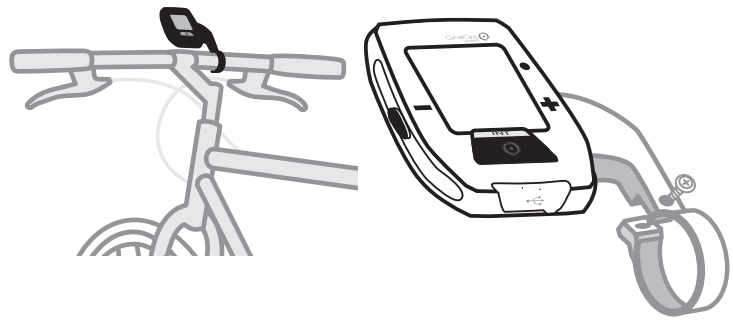


O-Rings: Crisscross under stem or handlebar, and latch on hooks

OR

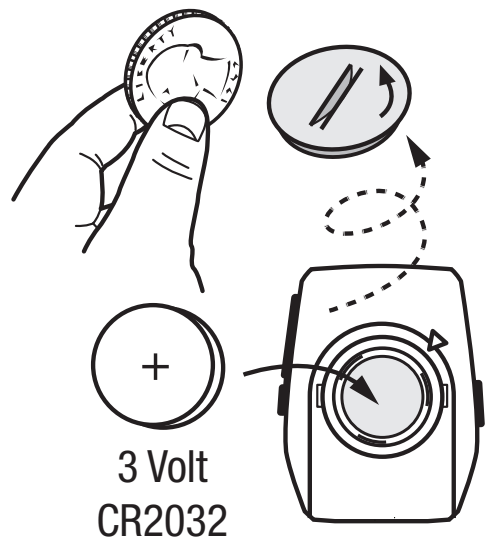
Zip tie around stem, through slots

FRONT MOUNT



BATTERY

The Joule is powered by a CR2032 coin cell battery. Typical battery life is about 300 hours of operation.



3 Volt
CR2032

CHAPTER 2: NAVIGATION

NAVIGATION OVERVIEW

There are three buttons on the sides of the Joule and one large button below the display.

Micro-USB Port

BUTTONS	FUNCTION
[ENTER] button	* Press once to move through Dashboards * Hold for 3 seconds - Go to Menu * Selects item in Menu * Hold for 3 seconds in Menu - Go to Dashboard
[PLUS] button	Shifts “arrow” counterclockwise among the data fields
[MINUS] button	Shifts “arrow” clockwise among the data fields
[INTERVAL] button	Press to mark intervals * Hold for 3 seconds- Go to Interval view * Hold for 3 seconds- Go to Ride view

ICONS

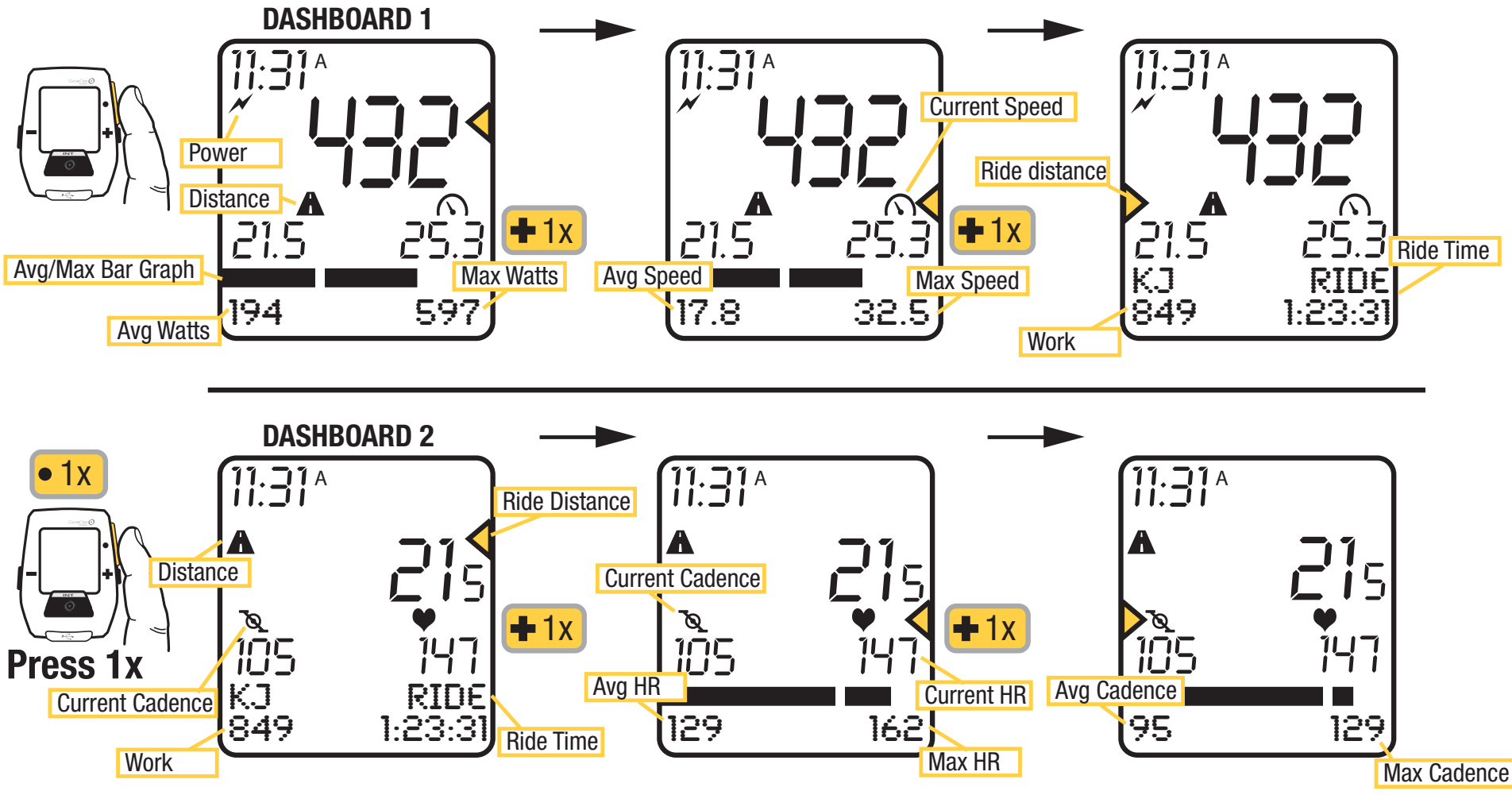
The Joule uses icons for:

ICONS	MEANING	ABOUT
	Cadence	The revolutions per minute (rpm) of the cranks at which you pedal.
	Current percent grade	The degree of inclination.
	Distance	The length of the ride.
	Kilojoules	The kilojoule is a measure of energy exerted over time. It is the average power output in watts mulitplied by time in seconds divided by 1000.
	Power	Measured in watts where work is equal to force times distance.
	Time	The duration of the ride.
	Normalized Power	An estimate of the power that could have been maintained, had power been perfectly constant.
	Heart rate	The number of heart beats per minute (bpm).
	Speed	The rate of motion.
	Watts/Kg	Power divided by the rider's weight in kilograms. This compares power values from rider to rider.

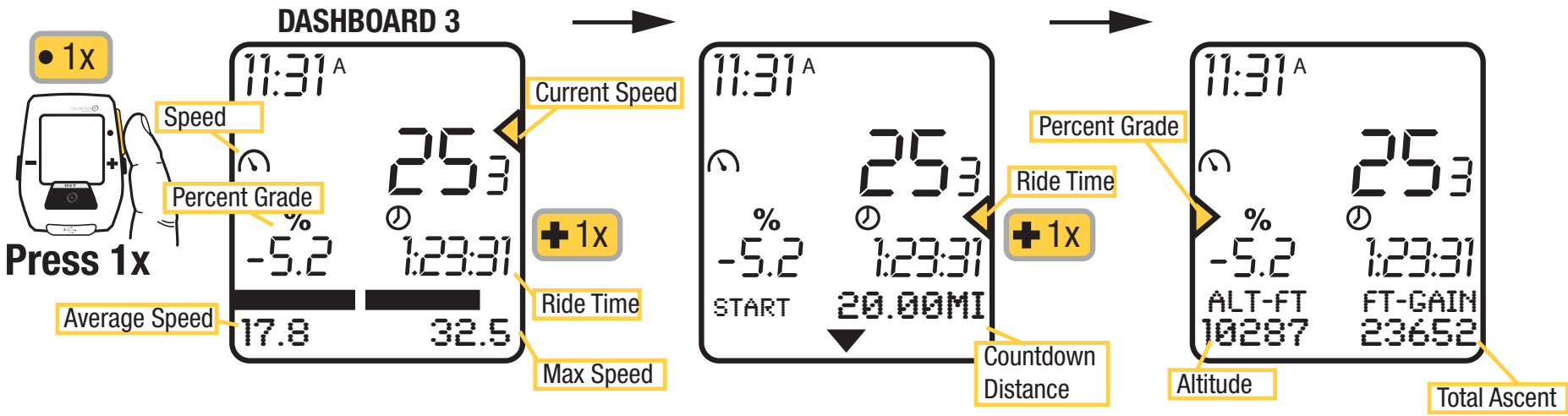
CHAPTER 2: NAVIGATION

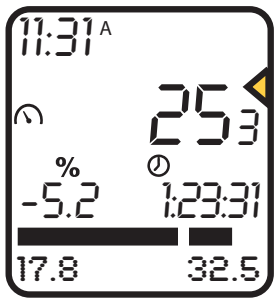
DASHBOARDS

Joule has three dashboards, each of which is customizable in PowerAgent.

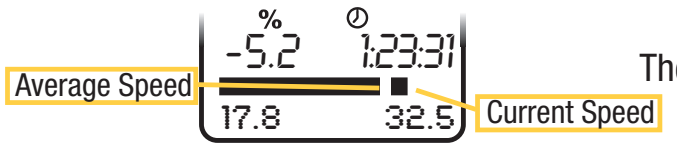


DASHBOARDS (continued)

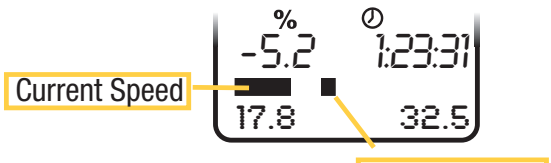




When average and maximum values are shown in the lower part of the display, a bar graph is shown to graphically indicate the average, maximum and current values. The bar graph can be turned off in PowerAgent.



The current value is represented by the total length of the bar graph.



The average value is represented by a line in the bar graph. Note: Gap if average if less than current, bar if average is greater than current.

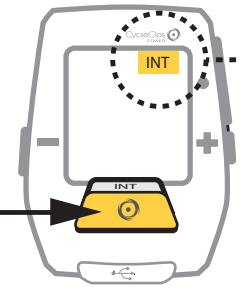
CHAPTER 3: INTERVALS

RIDE VS. INTERVAL VIEW

The Joule has two modes for viewing data related to the total ride vs. a portion of the ride.

[INTERVAL] button

Press to mark intervals



IMPORTANT

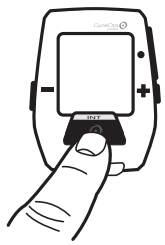
Be sure to notice if the “INT” label is present in the display. This indicates the the unit is in INTERVAL mode.

INTERVALS

Intervals are useful for viewing ride data specific to a section of your ride, such as a hill or other period of high intensity riding.

RIDE VIEW

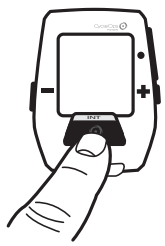
Press & Hold 3 sec. to go to Interval View

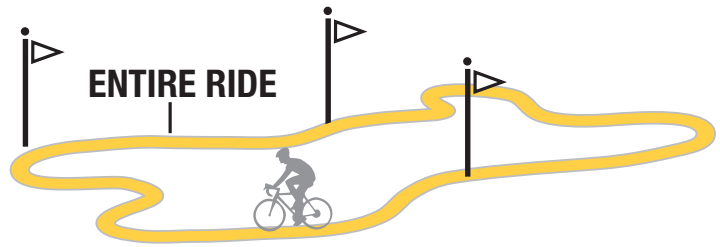


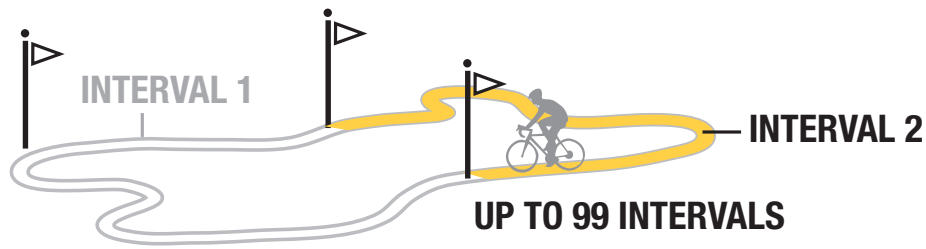
INTERVAL VIEW

Displays data for current interval

Press & Hold 3 sec. to go back to Ride View





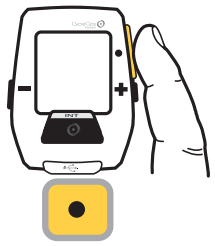


CHAPTER 4: MENU

MENU OVERVIEW

Enter the Menu to review ride history, pair sensors, use the training function, and configure the device.

FROM DASHBOARD



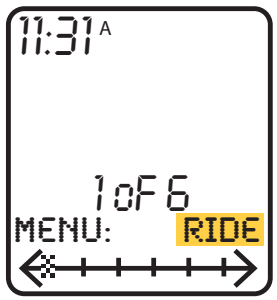
Press & Hold 3 sec.

Press • [ENTER] to select sub-menu

Press 1x to go forward

Press 1x to go backward

Press • [ENTER] to select item



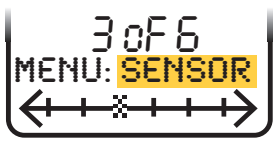
RIDE

The RIDE menu allows you to pause, save, and clear ride data.

HISTORY

The HISTORY menu allows you to view averages from your past rides. HISTORY contains last ride, last 1 week, 2 weeks, 4 weeks, and all rides. You can also pick a ride to view data from a specific date.

Press + [Plus] to move in Menu



SENSOR

The SENSOR menu allows you to choose between bikes, find sensors, pair sensors, manually zero a power meter, and set wheel circumference.

TRAINING

The TRAINING menu allows you to set a countdown timer based on distance, time or kilojoules.

DEVICE

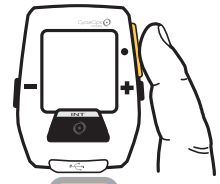
The DEVICE menu allows you to set the odometer, clock, choose the units of measure, and language.

DASH

Return to Dashboard

CHAPTER 4: MENU SELECTIONS (RIDE & HISTORY)

FROM DASHBOARD



Press • [ENTER] to select sub-menu

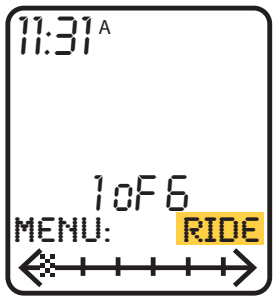
Press 1x to go forward

Press 1x to go backward

Press • [ENTER] to select item

Press & Hold 3 sec.

MENU>RIDE

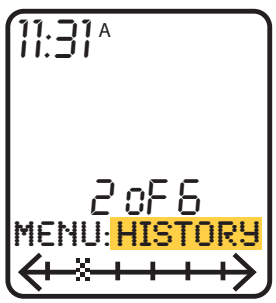


MENU>RIDE>SELECTION RESULTS

PAUSE →	Ride data will continue to be displayed, but it is not recorded.
SAVE →	Saves ride and adds it to history.
CLEAR →	Clears ride and deletes it. It will not be stored in history.
CLEAR ALL →	Deletes all ride data on device, but not history.
BACK->MENU →	Return to Menu.

MENU>HISTORY

Press 1x



MENU>HISTORY>SELECTION RESULTS

- LAST RIDE
- LAST 1 WK
- LAST 2 WK
- LAST 4 WK
- ALL RIDES
- PICK RIDE
- BACK->MENU → Return to Menu

For any of the rides shows details for metrics such as :

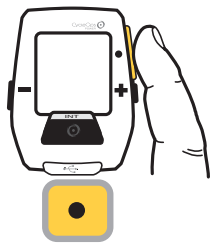
T-MILES/KM	Average, maximum power
T-TIME	Total time
T-KJ	Total kilojoules
WATTS	Total miles/kilometers
KPH/MPH	Average, maximum speed
H-R	Average, maximum heart rate
RPM	Average, maximum cadence
5-20 PEAK	5 minute, 20 minute peak power
NP	Normalized power
TSS	Training stress score
IF	Intensity factor
GAIN	Meters/feet gained in elevation
VAM	Rate of elevation gain in meters per hour

Press the INTERVAL button while viewing history to view intervals.

CHAPTER 4: MENU SELECTIONS (SENSORS)

Joule is compatible with many ANT+ sensors, each having a unique code.

FROM DASHBOARD



Press & Hold 3 sec.

Press • [ENTER] to select sub-menu

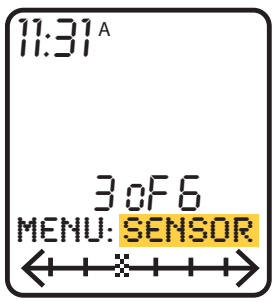
Press 1x to go forward

Press 1x to go backward

Press • [ENTER] to select item

MENU>SENSOR

Press 1x

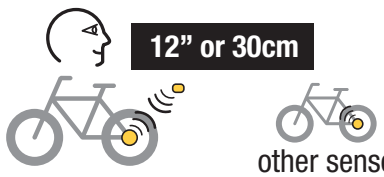


MENU>SENSOR>SELECTION RESULTS

WHICH BIKE ◄ 1 2 ►		Select which bike you want to use Note: Enable BIKE 2 in PowerAgent
FIND →		Finds paired sensors
PAIR →	ALL	Pairs all sensors
	PAIR: POWER	Pairs power sensor
	PAIR: H-R	Pairs heart rate sensor
	PAIR: CADENCE	Pairs cadence sensor
	PAIR: SPEED	Pairs speed sensor
ZERO →		Performs Manual Zero
WHEEL →	SET CIRCUMF	<- +> Press + or - for your circumference, then press • Set circumference of wheel
MENU →		Return to Menu

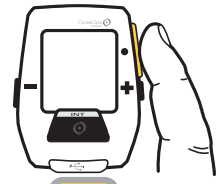
IMPORTANT

PROXIMITY PAIRING
Pairs devices closest to sensor first.
Hold Joule within 12” of PowerTap hub when in the presence of other sensors.



CHAPTER 4: MENU SELECTIONS (WORKOUT & DEVICE)

FROM DASHBOARD



Press • [ENTER] to select sub-menu

Press 1x to go forward

Press 1x to go backward

Press • [ENTER] to select item

Press & Hold 3 sec.

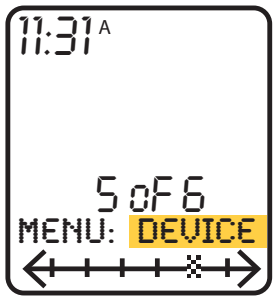
MENU>WORKOUT

MENU>WORKOUT>SELECTION RESULTS

TRAIN: DISTANCE →	SET KM/MILE	Use the [-] [+] to setup a workout based on distance
TRAIN: TIMER →	SET TIMER	Use the [-] [+] to setup a workout based on time
TRAIN: KJ →	SET KJ	Use the [-] [+] to setup a workout based on kilojoules
BACK->MENU →		Return to Menu

Press 1x

MENU>DEVICE

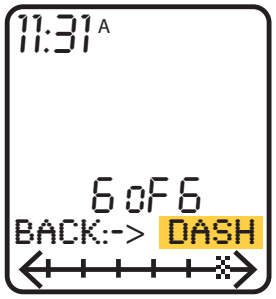


MENU>DEVICE>SELECTION RESULTS

DEV: TRIP →	TRIP METER		Use the [-] [+] to set the odometer
DEV: ALTI →	SET ALT, M/FT		Use the [-] [+] to set altimeter to a known elevation
DEV: CLOCK →	DATE FORMAT	→	Set format & date
	TIME FORMAT	→	Set format and time
	SET TIME	→	Set time that displays on screen
DEV: UNITS →	SET UNITS		Use the [-] [+] to choose between English/Metric
DEV: LANGUAGE →			Use the [-] [+] to choose a language for the device. Available languages are English, German, Italian, French and Spanish.
BACK->MENU →			Return to Menu

CHAPTER 4: MENU SELECTIONS (BACK TO DASHBOARD)

MENU>BACK TO DASHBOARD



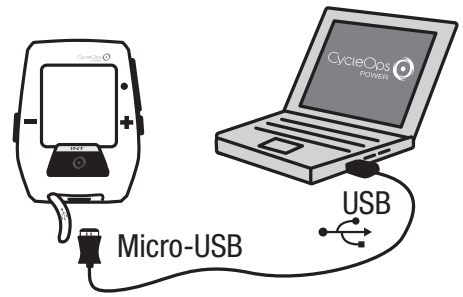
MENU>BACK DASH>SELECTION RESULTS

BACK->DASH →	Return to Dashboard

CHAPTER 5: DATA & DOWNLOADS

DOWNLOAD

To further configure the Joule and customize the dashboards, install PowerAgent software from www.cycleops.com/poweragent. PowerAgent also allows you to download and analyze your ride data.



CHAPTER 6: FAQ & TROUBLESHOOTING

FREQUENTLY ASKED QUESTIONS

For the most current FAQ's and troubleshooting please visit the customer support section of our website, www.cycleops.com.

CHAPTER 7: IMPORTANT PRECAUTIONS

Keep eyes on the road. Do not become overly engaged with display.
We recommend getting familiar with the computer functions while stationary.
The computer and chest strap are water resistant, not waterproof. Avoid sustained water contact and do not deliberately place in water or under high-pressure sprays.
Avoid spraying the unit directly with solvent. Do not use thinner or other solvents to clean parts.
Failure to adhere to these precautions may cause premature failure or incorrect operation of the unit and may void the warranty.

CHAPTER 8: TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS FOR CYCLEOPS JOULE

Joule Features

Altitude
Cadence (current, average, maximum)
Current, Average Bar Graph
Heart Rate (current, average, maximum)
Intensity Factor (IF)
Kilojoules per Hour
Normalized Power (NP)
3 Customizable Dashboards
Percent Grade
Power (current, average, maximum)
Ride Distance
Ride Time
Speed (current, average, maximum)
Time of Day
Total Ascent
Total Kilojoules
Training Stress Score (TSS)
Watts per Kilogram (current, average, maximum) (W/KG)

Joule Technical Specifications

Unit Dimensions	68l x 49w x 23d (mm)
Display Size	34l x 30w (mm)
Display Type	Segmented LCD, dot matrix (17x72)
Weight	47 grams
Battery	CR2032
Battery Life	300 hours
Mount Type	Stem/Handlebar, Front
Interval button	Yes
Barometric Altimeter	Yes
Water Resistant	Yes, IPX 7
Ride Memory	20 hours
Ride History	8 weeks
ANT+ Compatible	Yes
Operational Temperature	0-104 F degrees
Download cable	Micro USB

CHAPTER 9: Warranty

WARRANTY
In the event that warranty service is required, original sales receipt may be required.

The Joule is warranted to the original retail purchaser to be free from defects in materials and workmanship. Warranty coverage is valid to the original purchaser only and proof of purchase will be required.
- Electronics
- 1 year
- 2 years (Europe)

THIS WARRANTY DOES NOT COVER:
- Normal wear and tear.
- Any damage, failure or loss caused by accident, misuse, neglect, abuse, improper assembly, improper maintenance, or failure to follow instructions or warnings in User Guide.
- Use of products in a manner or environment for which they were not designed.

LIMITATIONS
The foregoing warranties are in lieu of and exclude all other warranties not expressly set forth herein, whether expressed or implied by operation of law or otherwise, including, but not limited to, warranties of merchantability or fitness for a particular purpose. Saris Cycling Group shall in no event be liable for incidental or consequential losses, damages or expenses in connection with its exercise products. Saris Cycling Group's liability hereunder is expressly limited to the replacement of goods not complying with this warranty or, at Saris Cycling Group election, to the repayment of an amount of the purchase price of the exercise product in question. Some states do not permit the exclusion or limitation of implied warranties or incidental or consequential damages, so the preceding limitations and exclusions may not apply to you.

PROCEDURES
Warranty service will be performed by Saris Cycling Group or an authorized Saris Cycling Group Dealer. The original purchaser must provide proof of purchase. Service calls and/or transportation to and from the Authorized Saris Cycling Group Dealer are the responsibility of the purchaser.

- Saris Cycling Group will have the option to repair or replace any product(s) which requires warranty service.
- Saris Cycling Group will replace any unit that is structurally defective with a new unit or replace the unit with a unit of equal value.
- In the event a product cannot be repaired, Saris Cycling Group will apply a limited credit reimbursement toward another CycleOps product of equal or greater value.

CycleOps 5253 Verona Road Madison WI 53711 www.cycleops.com 20819a 12/11